

### Effect of the Solar Eclipse on Some Atmospheric Parameter

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#### Abstract

To study the solar terrestrial relationship atmospheric parameters such as positive conductivity negative conductivity, aerosols measurement for forward and backward scattering and atmospheric temperature were recorded at Roorkee during the solar eclipse of October 24 1995 where the eclipse was about 90%. These observations were taken for about fifteen days spanning both before and after the eclipse.

The aerosol concentration increases slightly during the eclipse. This has been attributed to the gas to particle conversion because of the decrease of temperature. The effect on atmospheric is negligible. The atmospheric pulses are known to travel large distances and their origin might be beyond the eclipse region. The most pronounced effect was on atmospheric electrical conductivities which increased during the solar eclipse. This increase is very large for negative conductivity than the positive conductivity. The increase of conductivity has been attributed to the Forbush decrease.